(No Model.)

C. S. BEEBE.

VEHICLE SHAFTS.

No. 458,356. Patented Aug. 25, 1891.

Fig. 1.

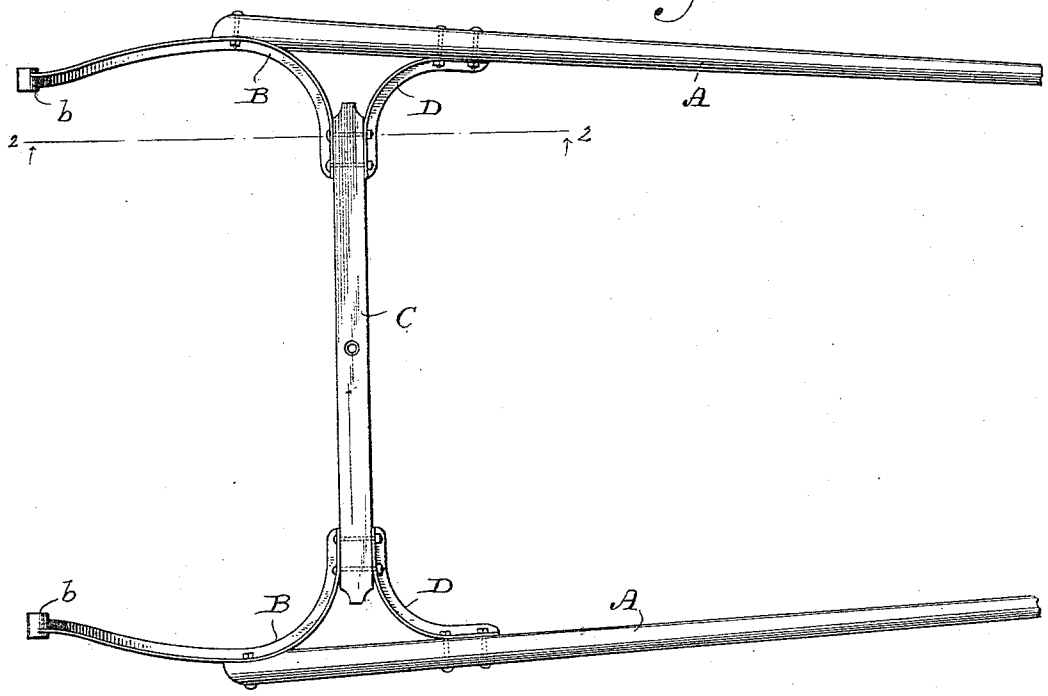
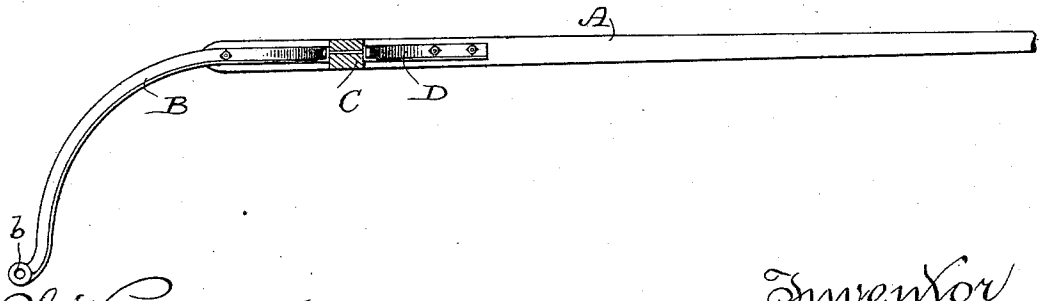


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

CHARLES S. BEEBE, OF RACINE, WISCONSIN.

VEHICLE-SHAFTS.

SPECIFICATION forming part of Letters Patent No. 458,356, dated August 25, 1891.

Application filed March 23, 1891. Serial No. 386,026. (No model.)

To all whom it may concern:

Be it known that I, CHARLES S. BEEBE, a citizen of the United States, and a resident of Racine, in the county of Racine, and in the State of Wisconsin, have invented certain new and useful Improvements in Vehicle-Shafts; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in certain peculiarities of construction and combination of parts to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents a plan view of a pair of vehicle-shafts constructed according to my invention; and Fig. 2, a side elevation of the same, the cross-bar being in transverse section on line 2 2 of the preceding figure.

Referring by letter to the drawings, A represents wooden shafts having metal heels B, the latter being bolted or otherwise detachably connected to the shafts, and a cross-bar C and braces D are also detachably connected to said shafts and cross-bar. The detachable shaft-heels B and braces D are preferably of angle or so-called "T" iron, and the former are shown as having coupling-eyes *b* formed on their lower ends. The heels B are shown compound as to curve, in order to give the shafts A the proper rise and to form braces that come in against the cross-bar C from the points at which they are bolted or otherwise detachably secured to said shafts, and I prefer to curve the braces D in order to get the best possible result as to strength and finish.

Heretofore it has been usual to make wooden shafts of sufficient length to permit of their rear ends or heels being bent to the proper curvature, this bending being of itself a somewhat expensive operation, and the object of my invention is to effect a saving in cost of the manufacture of vehicle-shafts, as well as to permit of the knocking down and packing of the same in small space. These objects I attain by the substitution of the metal heels for wooden ones and the general construction and combination of parts above described.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A pair of vehicle-shafts comprising metallic heels, each of which is curved in one direction to give the proper rise and then curved in another direction to form a brace, a wooden section secured to the first curve of each heel, and a cross-bar having its ends secured to the brace portions of said heels, substantially as set forth.

2. A pair of vehicle-shafts comprising metallic heels, each of which is curved in one direction to give the proper rise and then curved in another direction to form a brace, a wooden section secured to the first curve of each heel, a cross-bar having its ends secured to the brace portions of said heels, and metallic braces uniting the wooden sections and cross-bar in front of the latter, substantially as set forth.

3. A pair of knockdown vehicle-shafts comprising metallic heels, each of which is curved in one direction to give the proper rise and then curved in another direction to form a brace, a wooden section having an unbent rear end detachably secured to the first curve of each heel, a cross-bar detachably connected to the brace portions of said heels, and metallic braces likewise connected to the wooden sections and cross-bar in front of the latter, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at the city of Racine, in the county of Racine and State of Wisconsin, in the presence of two witnesses.

CHARLES S. BEEBE.

Witnesses:
ERASTUS C. PECK,
SELMA E. BEEBE.